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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,818	02/08/2002	Jin-Woo Park	1514.1007	9551
21171	7590	11/28/2003	EXAMINER	
STAAS & HALSEY LLP			COLON, GERMAN	
SUITE 700				
1201 NEW YORK AVENUE, N.W.			ART UNIT	
WASHINGTON, DC 20005			PAPER NUMBER	
			2879	

DATE MAILED: 11/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,818

Applicant(s)

PARK ET AL.

Examiner

German Colón

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 10-18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 and 24 is/are allowed.
- 6) ☐ Claim(s) 1-9, 19, 20, 22, 23 and 25-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Amendment, filed on August 22, 2003, has been entered and acknowledged by the Examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 19, 20, 22, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKenna et al. (US 5,059,148) in view of Kurosawa et al. (US 6,057,647).

Regarding claim 1, McKenna discloses an EL display device comprising:

a substrate **30**;

an EL element on said substrate;

a flat panel **22** which encapsulates said EL element and is attached to said substrate;

at least one through hole formed in said flat panel; and

a through hole-shutting cap **26** which shuts said through hole.

McKenna discloses the EL element being protected from moisture by a silicon oil, but is silent regarding the limitation of the EL element being organic.

However, in the same field of endeavor, Kurosawa discloses an EL display device having an organic EL element comprising a substrate, a lower electrode, an organic EL layer and an

upper electrode, and teaches the desirability of protecting said organic EL display from oxygen and moisture by providing an upper substrate and a silicon oil in the space between the substrates (see Col. 15, lines 11-14). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a flat panel as disclosed by McKenna, to the organic EL element of Kurosawa, since Kurosawa teaches the desirability of protecting said organic EL element from oxygen and moisture by providing an upper substrate and a silicon oil.

Regarding claim 2, McKenna-Kurosawa discloses the through hole-shutting cap comprising a curable agent (see Col. 3, line 20 of '148).

Regarding claim 3, McKenna-Kurosawa discloses the through hole-shutting cap comprising a welding material (see Col. 3, lines 21-22 of '148).

Referring to claim 4, McKenna-Kurosawa discloses the welding material including Pb (see Col. 3, line 22 of '148).

Referring to claim 5, McKenna-Kurosawa discloses a through hole and a through hole-shutting cap. The recitation "the through hole being a passage which controls a pressure" has not been given patentable weight because is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. The Examiner notes that if said recitation is claimed as a functional limitation of the device, it should be recited as a means plus function limitation. Further, the organic EL device of McKenna-Kurosawa will inherently control a pressure inside a space formed between the flat panel and the substrate, once the through hole is shut.

Referring to claim 19, McKenna-Kurosawa discloses an adhesive which attaches said flat panel to said substrate (see Col. 3, lines 54-55 of '148).

Regarding claim 20, claims 20 is rejected over the reasons stated in the rejection of claim 5.

Regarding claim 22, McKenna-Kurosawa discloses the claimed invention except for the limitation of "at least one through hole formed in said substrate". McKenna-Kurosawa discloses the through hole formed in the flat panel. However, it has been held that rearranging of parts of an invention involves only routine skills in the art. Thus, it would have been obvious to one having ordinary skills in the art the time the invention was made to provide the at least one through hole in the substrate, since rearrangement of parts of an invention is considered within the skills of the art.

Regarding claim 23, claim 23 is rejected over the reasons stated in the rejection of claim 5.

Referring to claim 25, McKenna-Kurosawa discloses an adhesive which attaches said flat panel to said substrate (see Col. 3, lines 54-55 of '148).

4. Claims 6-9 and 26-28 rejected under 35 U.S.C. 103(a) as being unpatentable over McKenna-Kurosawa as applied to claims 1 and 22 above, and further in view of Taniguchi et al. (US 5,239,228).

Referring to claim 6, McKenna-Kurosawa discloses the claimed invention except for the limitation of "further comprising a moisture/water absorbing agent arranged at a location not shielding light emitted from the organic EL element". However, in the same field of endeavor,

Taniguchi discloses an EL device comprising a flat panel having a groove at a location not shielding light emitted from the organic EL element, said groove including a moisture-absorbing agent with the purpose of improving the moisture-resistance property of the EL device (see Col. 7, lines 38-40), which prevents or controls occurrence of dark spot of the organic element and increases the display life. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Taniguchi of providing a moisture-absorbing agent in order to improve the moisture-resistance property of the EL device, which prevents or controls occurrence of dark spot of the organic element and increases the display life.

Regarding claim 7, McKenna-Kurosawa-Taniguchi discloses the flat panel including a moisture absorbing agent reception groove (see Col. 7, lines 38-40 and Fig. 10 of '228).

Regarding to claim 8, McKenna-Kurosawa-Taniguchi discloses the claimed invention except for the limitation of "the location being a periphery region of said substrate". However, it has been held that rearranging of parts of an invention involves only routine skills in the art. Thus, it would have been obvious to one having ordinary skills in the art the time the invention was made to provide a moisture absorbing agent reception groove in the substrate, since rearrangement of parts of an invention is considered within the skills of the art.

Referring to claim 9, McKenna-Kurosawa-Taniguchi discloses the location being a periphery region of said flat panel (see Col. 7, lines 38-40 and Fig. 10 of '228).

Referring to claims 26-28, claims 26, 27 and 28 are rejected over the reasons stated in the rejection of claims 6, 7 and 9, respectively.

Allowable Subject Matter

5. Claims 21 and 24 are allowed.

Response to Arguments

6. Applicant's arguments with respect to claims 1-9, 19, 20, 22, 23 and 25-28 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that it would be unobvious to one of ordinary skill in the art to provide use the EL display device of McKenna to protect and organic EL layer.

However, Kurosawa discloses the desirability of using the features taught by McKenna to protect an organic EL element.

Applicant argues that it would be unobvious to one of ordinary skill in the art to provide the moisture-absorbing agent of Taniguchi et al. (US 5,239,228) because an inert medium is needed for the organic EL element.

However, McKenna-Kurosawa discloses an inert medium for the organic EL element.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 703-305-5987. The examiner can normally be reached on Monday thru Thursday, from 8:30 to 6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 703-305-4794. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

gc


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